



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Nancy J. Tolan et al.

Art Unit : 3677

Serial No. : 10/688,032

Examiner : Ruth C. Rodriguez

Filed : October 15, 2003

Conf. No. : 2173

Title : LOW PROFILE TOUCH FASTENER

**Mail Stop AF**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

REMARKS SUBMITTED WITH PRE-APPEAL REQUEST FOR REVIEW

In reply to the Office Action of July 31, 2006, Applicants submit the following remarks. A request for a review of identified matters on appeal is hereby submitted with a Notice of Appeal. Review of identified matters by a panel of Examiners is requested because the rejections of record are clearly not proper in view of clear legal and factual deficiencies. In particular, Applicants respectfully submit that the Office has failed to provide enabling references and more over to establish a *prima facie* case of obviousness.

Claims 1-3, 5-20, 22-37 and 39-57 are pending; claims 1, 19, and 37 being in independent form. Claims 1-3, 7-20, 24-37 and 39-57 stand rejected under 35 U.S.C. 103(a) as being obvious over Kingsford et al. (US 6,851,161 B2) in view of Provost et al. (US 4,984,339) and Kennedy (US 6,348,419 B1).

Independent claims 1, 19 and 37 are each directed to a low profile releasable touch fastener. Claim 1 requires, in pertinent part, that the touch fastener have a loop component and a hook component configured to releasably engage female fastener elements of the loop component such that the fastener has an engaged thickness of less than about 0.11 inch and a final peel resistance of at least 0.3 pound per inch of closure width. Applicants have found that

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10/30/06  
Susan Lanney

low profile closures having an engaged thickness of less than about 0.11 inch *in combination* with a final peel resistance of at least 0.3 pound per inch of closure width as disclosed are new, useful, and non-obvious.

Kingsford discloses a thin rib-and-groove sealing closure with hook and loop fastener elements and describes how using the hook and loop fasteners elements in combination with a seal reduces the likelihood of unwanted opening of the closure (*See e.g.* col. 4, lines 15-33). However, Kingsford neither discloses nor enables the formation a particularly strong closure to perform its function, and discloses nothing regarding peel strength.

The Office concedes that Kingsford fails to disclose a touch fastener that has hook and loop components provided with a final peel resistance of at least 0.3 pounds per inch of closure width. However, the Office contends that Provost provides hook and loop components that provide a final peel resistance of at least 0.3 pounds per inch of closure width.

To establish a *prima facie* case of obviousness, the Office must establish (1) that the prior art reference (or combined references) teach or suggest all the claim limitations; and (2) that there is some suggestion or motivation, either in the references themselves, or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or references, or to combine reference teachings; and (3) that there is a reasonable expectation of success. Merely combining references that separately disclose all of the recited claim limitations does not, by itself, establish a *prima facie* case of obviousness. The combined references must together *enable* the invention sufficiently to provide one of ordinary skill with a reasonable expectation of success. In this case, merely combining one reference showing a thin fastener with another showing a strong fastener does no more to show how to create the claimed fastener than does combining a hot-air balloon with an automobile show how to create a heavier-than-air flying machine. It was not until Applicants' invention that the claimed invention was enabled.

Provost discloses hook and loop fasteners having a profile defined by inner and outer generally concave and convex smooth surfaces, respectively. The disclosure provides a hook height of 0.050 inches  $\pm$  0.002 inches (col. 5, line 8), but does not disclose, suggest, or enable the use of the hooks as part of a low profile closure, and discloses nothing of overall closure thickness. Provost also discloses in Table III a range of peel and sheer resistances for hooks of different materials to exemplify the performance of the disclosed hook geometry. However,

Provost does not disclose or suggest that the peel data corresponds to either Initial Peel Resistance or Final Peel Resistance. Applicants respectfully submit that peel resistance is a function of both the loop component and the hook component, not just of the hook. Kingsford and Provost do not disclose, suggest, or enable a manner in which to combine certain configurations of Provost's hooks that may provide high peel and shear resistance to Kingsford's rib-and-groove sealing closure to result in a low profile closure exhibiting high peel and/or shear resistance. Furthermore, Provost does not even describe the type of loop material used in Applicants' closures. There is no enabling disclosure, motivation, or any reasonable expectation of success in Provost or Kingsford that would lead a person of ordinary skill in the art to provide a touch fastener having a loop component and a hook component configured to releasably engage female fastener elements of the loop component such that the fastener has an engaged thickness of less than about 0.11 inch and a final peel resistance of at least 0.3 pound per inch of closure width.

The Examiner takes official notice that bi-directional male fastener components and woven fabric loop components are well known in the art. For the record, Applicants do not concur that finding such elements in the prior art makes reciting them in connection with or in the context of a broader claimed invention obvious. Thus, Applicants do not concur with the Examiner's official notices, and don't believe that patentability of the claims is determined by such notices.

Kennedy discloses an extruded hook portion of a hook and loop fastener system created on a mold roll having hook forming cavities in its surface and modified to have favorable characteristics for bonding to other materials. Kennedy does not disclose or suggest that the hooks formed can be used as part of a low profile closure, and does not disclose a loop component, and therefore does not disclose any overall closure thickness. As a result, there is no motivation to combine this reference with Kingsford and Provost.

Applicants therefore respectfully submit that claim 1 and all claims that depend therefrom, are non-obvious over Kingsford in view of Provost and Kennedy.

Claim 19 requires, in pertinent part, that the touch fastener have a loop component and a hook component configured to releasably engage female fastener elements of the loop

component such that the fastener has an engaged thickness of less than about 0.11 inch and an initial peel resistance of at least 0.5 pounds per inch of closure width.

The Office contends that a combination of rejections of claims 1 and 2 (claim 2 depending from claim 1 and featuring initial peel resistance) will result in the limitations of claim 19. Applicants respectfully submit that the Office is not considering the claimed invention as a whole. While claim 1 features a combination of thinness and *final* peel resistance, claim 19 features a combination of thinness and *initial* peel resistance. Claim 2 features a combination of thinness, *initial* peel resistance and *final* peel resistance. Obviousness cannot be established by using the Applicants' application as a template to fit together independent pieces of prior art. *See e.g. Interconnect Planning Corp. v. Feil*, 774 F.2d 1132; *Loctite Corp. v. Ultraseal Ltd.*, 781 F.2d 861; and *In re Fine*, 837 F.2d 1071. Accordingly, claims are not disjointed lists of elements, but present an invention that must be considered *as a whole*. *See e.g. MPEP 2141.02*; and *Stratoflex, Inc. v. Aeroquip*, 713 F.2d 1530. Applicants respectfully submit that claim 19 and its dependent claims are non-obvious over Kingsford in view of Provost for at least the reason that the cited combination of references neither suggests nor enables a low profile closure having an engaged thickness of less than about 0.11 inch in combination with an initial peel resistance of at least 0.5 pounds per inch of closure width.

Claim 37 requires, in pertinent part, that the touch fastener have a loop component and a hook component configured to releasably engage female fastener elements of the loop component such that the touch fastener has an engaged thickness of less than about 0.11 inch and an *initial shear* resistance of at least 10 pounds per square inch.

The Office contends that a combination of rejections of claims 1 and 3 (claim 3 requires "the hook and loop components are so configured to provide an initial shear resistance of at least 10 pounds per square inch") will result in the limitations of claim 37. Again, Applicants respectfully submit that the Office is not considering the claimed invention as a whole. Applicants submit that claim 37 and its dependent claims are non-obvious over Kingsford in view of Provost, or of Provost and Kennedy, for at least the reason that neither cited combination of references suggests nor enables a low profile closure having an engaged thickness of less than about 0.11 inch in combination with an initial shear resistance of at least 10 pounds per square inch.

Claims 5, 6, 22, 39, 40, and 55-57 stand rejected under 35 U.S.C. 103(a) as being obvious over Kingsford et al. (US 6,851,161 B2) in view of Provost et al. (US 4,984,339), as applied to claims 1, 19, and 37; and further in view of Kennedy (US 6,348,419 B1). Please note that claim 21 was cancelled in the previous response. The Office concedes that Kennedy fails to disclose a hook component having a stitch hole tear strength of at least 2.0 pounds or at least 5.0 pounds. However, the Office asserts that Kennedy's disclosure of a component having a fabric sheet laminated to the hook component is *capable* of having such a stitch hole tear strength. Applicants take these statements to mean either that the Office believes that those hook components disclosed by Kennedy would *inherently* have a stitch hole tear strength of at least 2.0 pounds or 5.0 pounds, or that one of ordinary skill in the art would otherwise have been led by Kennedy to provide a fastener having such a stitch hole tear strength. Applicants respectfully disagree. In relying on inherency, the Office has the burden to show that the inherency *necessarily* flows from the disclosure of the reference used to reject the claims. It is not enough to show that a certain result *may* occur or is *capable* of occurring. Rather, the Office has the burden of showing that the result is *necessarily* occurring. See MPEP 2112; In re Rijckaert, 9 F.3d 1531; and Ex parte Levy, 17 USPQ2d 1464. As a result, the Office has failed to identify any particular teaching or aspect of Kennedy that would motivate a person of ordinary skill to provide a proposed Kingsford-Provost combination product with a particular stitch hole tear strength or to specifically reinforce a fastener product in such a way that a particular stitch hole tear strength is obtained.

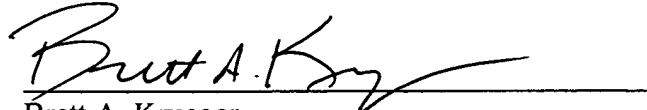
Applicants respectfully submit that all claims are non-obvious over Kingsford in view of Provost, or in view of both Provost and Kennedy, for at least the reasons outlined above, and respectfully request a Notice of Allowance. Please apply any other charges or credits to deposit account 06-1050, referencing Attorney Docket No. 05918-322001.

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Respectfully submitted,

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